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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Tomojiro SUGIMOTO et al.

Group Art Unit: 3746

Application No.: 10/826,355

Filed: April 19, 2004

Docket No.: 119492

For: FUEL INJECTION VALVE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

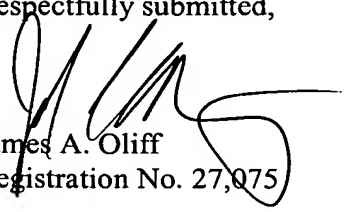
Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. Relevance of the non-English language reference 1 is discussed in the present specification.
- ☒ 3. A brief explanation of the relevance of the non-English language references 1-4 appears in the Appendix attached hereto.
- ☒ 4. English-language Abstracts of the non-English language references 1, 2 and 4 are attached hereto.

- ☒ 5. A computer-generated English translation of the following Japanese references has been obtained from the website of the Japanese Patent Office (<http://www.jpo.go.jp>), and is attached, but has not been reviewed for accuracy. See References 1-2.

Respectfully submitted,


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Date: July 19, 2004

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| <p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p> |
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Information List (Form 1)

| | |
|---------------|-------------------|
| US Serial No. | |
| Our Ref. | TYT,ND,NJ-P008-US |

The following is a List of References provided by Applicant. Please file an Information Disclosure Statement using this Information.

| Document Number | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s) |
|---|------------------|---|
| Japanese Patent Publication (Kokai) No. 9-32695 | February 4, 1997 | After passing through a seal portion 21, fuel flows inwardly and downwardly. Then fuel smoothly guided to flow laterally inwardly between a bottom surface 25 of needle valve 2 and an upstream surface 31 of a metering plate 3. Then, fuel spray out through nozzle holes 4 formed in the metering plate 3. Please refer attached official abstract. |
| Japanese Utility Model Publication (Kokai) No. 60-15968 | February 2, 1985 | A vortex plate 10 is attached to a downstream surface of a valve sheet member 6. The vortex plate 10 has vortex generator holes 10a. The vortex generator holes 10a are arranged as shown in figure 3. The cross section of the vortex generator hole 10a is shown in figure 4. As shown in figure 4, the cross sectional area of the vortex hole 10a at upstream side is greater than that at downstream side. A pressure plate 11 is attached to downstream surface of the vortex plate 10. The |

A. AOKI, ISHIDA & ASSOCIATES

Information List (Form 1)

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| US Serial No. | |
| Our Ref. | TYT,ND,NJ-P008-US |

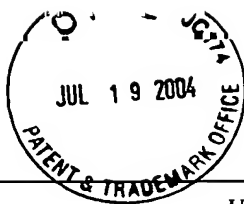
The following is a List of References provided by Applicant. Please file an Information Disclosure Statement using this Information.

| Document Number | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s) |
|--|-------------------|---|
| Japanese Patent Publication (Kokai) No. 8-296532 | November 12, 1996 | <p>pressure plate 11 has a large circular hole at a center portion thereof. An orifice plate 12 is attached to a downstream surface of the orifice plate 12. The orifice plate 12 has orifices 12a.</p> <p>An annular groove 65 is formed at a top end surface of a needle 25. The main stream of fuel flows along the outer spherical surface 64 so as to be drawn to the annular groove 65.</p> <p>Please refer attached official abstract.</p> |

List of Prior Art (Form 2)

This Form 2 lists the patent family members related to the document(s) cited in Form 1.

| Document(s) cited in Form 1 | Patent family member(s) | Publication date |
|---|----------------------------|------------------|
| Japanese Patent Publication (Kokai) No. 9-32695 | DE 196 29 755 C2 | December 3, 1998 |

Sheet 1 of 1

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| Form PTO-1449 (REV. 8-83) | | US Dept. of Commerce PATENT & TRADEMARK OFFICE | | ATTY DOCKET NO. 119492 | | APPLICATION NO. 10/826,355 | |
| INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | | | APPLICANTS Tomojiro SUGIMOTO et al. | | | |
| | | | | FILING DATE April 19,2004 | | GROUP 3746 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | |
| | 1) | JP A 9-32695 w/ abst. & trans | 02/04/1997 | JAPAN | | | |
| | 2) | JP A 8-296532 w/ abst. & trans | 11/12/1996 | JAPAN | | | |
| | 3) | JP U 60-15968 | 02/02/1985 | JAPAN | | | |
| | 4) | DE 196 29 755 C2 w/ abstract | 12/03/1998 | GERMANY | | | |
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| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | |
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| EXAMINER | | | | | DATE CONSIDERED | | |
| Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |

Date: July 19, 2004